

BOOTH, FRERET, IMLAY & TEPPER, P.C. ORIGINAL

ATTORNEYS AT LAW

CHRISTOPHER D. IMLAY
CARY S. TEPPER

5101 WISCONSIN AVENUE, N.W.
SUITE 307
WASHINGTON, D.C. 20016-4120

TELEPHONE: (202) 686-9600
FACSIMILE: (202) 686-7797

ROBERT M. BOOTH, JR. (1911-1981)
JULIAN P. FRERET (RETIRED)

October 26, 1998

RECEIVED

OCT 26 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Magalie Roman Salas, Secretary
Federal Communications Commission
1919 M Street, NW
Room 222
Washington, DC 20554

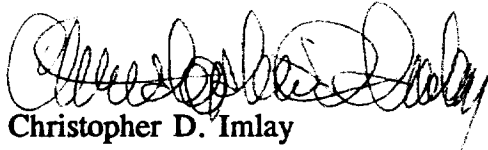
ATTENTION: Office of Engineering and Technology

Re: ET Docket 98-142

Dear Ms. Salas:

Attached herewith for filing, please find an original and 4 copies of Reply Comments of the Society of Broadcast Engineers in the captioned docket proceeding. These Reply Comments are not being tendered timely. The Reply Comment date was October 13, 1998. Accordingly, please consider this filing as either late-filed Reply Comments, or alternatively as a written ex parte submission pursuant to section 1.1206 of the Commission's rules. Should any question arise concerning the tendering of these late filed Reply Comments, kindly notify the undersigned counsel.

Yours very truly,


Christopher D. Imlay

CDI/dh

Enc.

cc: All Parties

No. of Copies rec'd
LIBABODE

024

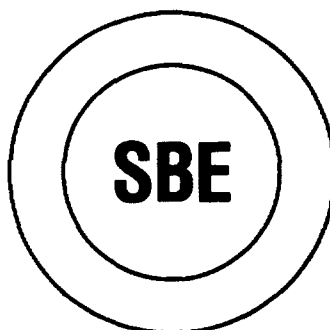
RECEIVED

OCT 26 1998

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY**

**Reply Comments of the
Society of Broadcast Engineers, Inc.**

**ET Docket 98-142
7 GHz Space-to-Earth
MSS Downlinks**



October 26, 1998

©1998 SBE, Inc. All rights reserved.

SOCIETY OF BROADCAST ENGINEERS, INC.
Indianapolis, Indiana

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

SBE Reply Comments: ET Docket 98-142

Alcatel Network Systems, a microwave equipment manufacturer, that proposes allowing digital modulation in the 2, 2.5, 7, and 13 GHz TV BAS bands as well¹. Further, at least four manufacturers of TV BAS microwave equipment, Alcatel, Microwave Radio Corporation ("MRC"), Harris Farinon ("Farinon"), and Nucomm, Inc., either currently offer, or have indicated that they plan to offer, digitally-modulated 7 GHz TV BAS radios. Therefore, it is clear that if the proposed PFD limits are insufficient to protect terrestrial POFS links operating in the 6,700–6,875 MHz band, those limits will also be insufficient to protect digitally-modulated TV BAS radios operating between 6,875–7,075 MHz (*i.e.*, TV BAS Channels B1 through B8). Thus, while SBE continues to believe that the proposed PFD limits pose little or no threat to analog FM video TV BAS radios, SBE believes that TIA's greater experience with digitally-modulated terrestrial POFS microwave systems means that its warning of interference is credible and indicates that sharing of the 7 GHz TV BAS band will NOT prove feasible.

II. SBE Concurs with TIA Warning Not To Allow MSS Satellite Downlink Receive Stations to "Warehouse" Frequencies

3. In the event that space-to-Earth downlinks are nevertheless granted co-equal status to terrestrial TV BAS operations, SBE strongly agrees with the TIA observation that MSS entities must NOT be allowed to request protection of a terrestrial receive site for all possible frequencies. Such a policy would constitute blatant and abusive "warehousing" of spectrum, something that the Commission has long prohibited terrestrial microwave links from doing. MSS downlink receive sites, and MSS uplink transmit sites, must only be authorized or protected for bandwidth they can demonstrate is immediately needed and will be immediately used, just as terrestrial microwave applications are subject to strict limitations that only allow applying for bandwidth that will be immediately placed into service.

II. Commission Should Place Limits on the Number and Location of Gateway Uplink Stations

4. SBE notes that Constellation Communications, Inc. ("Constellation"), a MSS party, indicated that it "anticipates" that its system will require only six uplink, or "gateway," stations, and that these stations will only be built "in rural areas far from commercial

¹ SBE is informed that this Petition was filed with the Commission on March 6, 1998, over 7 months ago, yet neither a rule making ("RM") number, Notice of Inquiry ("NOI"), or Notice of Proposed Rule Making ("NPRM") has yet been issued. SBE urges the Commission to proceed with this necessary change to the BAS rules.

SBE Reply Comments: ET Docket 98-142

airports.” Similarly, Satellite CD Radio, Inc. (“CD Radio”) states that it anticipates “only two unlink (sic) earth stations, and in any event a very small number.” SBE has heard such claims in the past, only to then see filings for uplinks in major markets.² Therefore, SBE urges that rules be adopted to ensure that the “anticipation” platitudes actually occur, by requiring that no gateway station can be within 300 kilometers of a Standard Metropolitan Statistical Area (“SMSA”) as defined the U.S. Census in effect at the time of the filing, and that each MSS entity can have no more than six such stations. MSS entities should have no problem with either of these restrictions based on their comments to this docket.

² For example, see the March 12, 1993, SBE Informal Objection to the applications of Loral Aerospace Holdings, Inc. (“Loral”), Primosphere Limited Partnership (“Primosphere”), and Sky-Highway Radio Corp. (“Sky-Highway”) for New Digital Audio Radio Service Satellite Systems. Loral requested 7046–7052 MHz (bracketing TV BAS Channels B7 and B8) for its proposed uplinks. Primosphere asked for 7,025–7,075 MHz (TV BAS Channels B7 and B8) for uplinks “at or near” Bangor, Duluth, Los Angeles, Miami, Seattle, and Wichita. Sky-Highway asked for 7,048–7,052 MHz (again bracketing TV BAS Channels B7 and B8) somewhere in Douglas County, Colorado. SBE notes that Douglas County is between Denver and Colorado Springs, both of which are significant population centers.

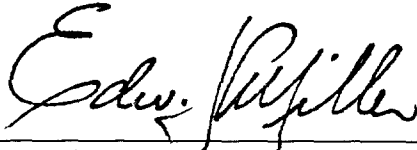
Similarly, in its original May 18, 1990, application, CD Radio had indicted that its uplink site would be at Montrose, Colorado, which certainly qualifies as a “rural area.” The uplink location then changed to the Washington DC area, and then, in October of 1997, to the Manhattan area of New York. To CD Radio’s credit, it at least has attempted to prior-coordinate use of its two requested frequencies, 7040.45 MHz and 7042.5 MHz (both falling in TV BAS Channel B7) with the New York TV All-Industry Committee (“TVAIC”), and to the best of SBE’s knowledge that coordination process is currently in progress. Nevertheless, SBE notes that both Washington DC and Manhattan are a long way from Montrose, Colorado.

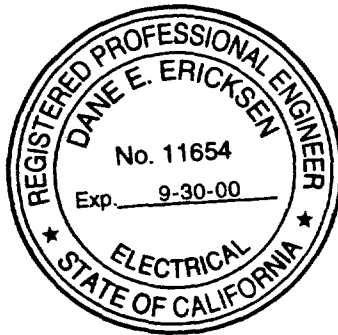
SBE Reply Comments: ET Docket 98-142

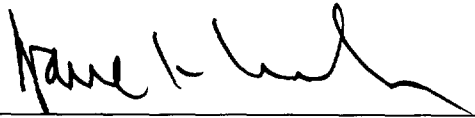
III. Summary

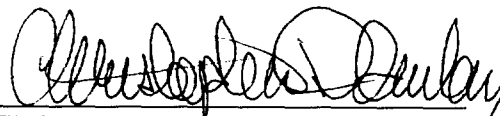
5. The TIA comments lead SBE to conclude that although space-to-Earth MSS downlinks could share the 7 GHz TV BAS band with FM video analog terrestrial microwave links, such sharing would not work when those links convert to digital modulation. And if such frequency sharing is nevertheless adopted, SBE shares TIA's concern that MSS receive sites could effectively "freeze" broadcasters use of the 7 GHz band if MSS entities are allowed to request protection for every possible frequency in the entire band. Finally, SBE has no confidence in the MSS industry's "anticipations" that Earth-to-space uplinks will be few in number and only built in remote rural areas; the Commission needs to adopt rules that will ensure that these "anticipations" in fact take place.

Society of Broadcast Engineers, Inc.

By 
Edward Miller, CPBE
President



By 
Dane E. Ericksen, P.E., CSTRE
Chairman, SBE FCC Liaison Committee

By 
Christopher D. Imlay, Its Counsel

October 26, 1998

Booth, Freret, Imlay & Tepper
5101 Wisconsin Avenue, NW, Suite 307
Washington, D.C. 20016
202/686-9600